

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/AU2004/001712

| <b>A. CLASSIFICATION OF SUBJECT MATTER</b>  |   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
|---|---|-----------------------|--|--|-----|---|-----|---|-----|--|-----|---|-----|--|-----|--|-----|---|-----|--|--|--|
| Int. Cl. <sup>7</sup> : A62D 3/00, A61L 9/014   |   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| According to International Patent Classification (IPC) or to both national classification and IPC   |   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| <b>B. FIELDS SEARCHED</b>   |   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| Minimum documentation searched (classification system followed by classification symbols)   |   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched   |   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)<br>WPIDS, MEDLINE, CA, JAPIO; KEYWORDS: HYDROXYL, PARTICLES, METAL, IRON, COPPER, FENTON, CONTAMINANT, SURFACE   |   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>   |   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| Category*   | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| X   | US2003/0134409 A (MALLOUK et al) 17 July 2003<br>Abstract, Example 3, claims 22, 23   | 1-19                  |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| A   | WO2001/078506 A (NANTEK INC) 25 October 2001<br>Whole document  | 1-19                  |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| A   | US6504077 B (PUROHIT et al) 7 January 2003<br>Whole document  | 1-19                  |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| A   | US6569353 B (GILETTO et al) 27 May 2003<br>Abstract, column 6, claims 1, 5 etc  | 1-19                  |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex   |   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| <p>* Special categories of cited documents:</p> <table> <tbody> <tr> <td>"A"</td> <td>document defining the general state of the art which is not considered to be of particular relevance</td> <td>"T"</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"E"</td> <td>earlier application or patent but published on or after the international filing date</td> <td>"X"</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"L"</td> <td>document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"Y"</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"O"</td> <td>document referring to an oral disclosure, use, exhibition or other means</td> <td>"&amp;"</td> <td>document member of the same patent family</td> </tr> <tr> <td>"P"</td> <td>document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </tbody> </table> |   |                       | "A"  | document defining the general state of the art which is not considered to be of particular relevance | "T" | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention | "E" | earlier application or patent but published on or after the international filing date | "X" | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone | "L" | document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y" | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art | "O" | document referring to an oral disclosure, use, exhibition or other means | "&" | document member of the same patent family | "P" | document published prior to the international filing date but later than the priority date claimed |  |  |
| "A"   | document defining the general state of the art which is not considered to be of particular relevance  | "T"                   | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| "E"   | earlier application or patent but published on or after the international filing date   | "X"                   | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone   |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| "L"   | document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | "Y"                   | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| "O"   | document referring to an oral disclosure, use, exhibition or other means  | "&"                   | document member of the same patent family  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| "P"   | document published prior to the international filing date but later than the priority date claimed  |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| Date of the actual completion of the international search<br>27 January 2005  | Date of mailing of the international search report<br>10 FEB 2005   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |
| Name and mailing address of the ISA/AU<br><br>AUSTRALIAN PATENT OFFICE<br>PO BOX 200, WODEN ACT 2606, AUSTRALIA<br>E-mail address: pct@ipaustralia.gov.au<br>Facsimile No. (02) 6285 3929   | Authorized officer<br><br>ROSS OSBORNE<br>Telephone No : (02) 6283 2404   |                       |  |  |     |   |     |   |     |  |     |   |     |  |     |  |     |   |     |  |  |  |

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## INTERNATIONAL SEARCH REPORT

International application No.  
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| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT |  |                       |
|---|--|-----------------------|
| Category*   | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| A   | US 6664298 B (REINHART et al) 16 December 2003<br>Whole document                   | 1-19                  |
| A   | US5789649 A (BATCHELOR et al) 4 August 1998<br>Whole document                      | 1-19                  |
| A   | WO 2000/045896 A (NORTHROP GRUMMAN CORP) 10 August 2000<br>Whole document,         | 1-19                  |

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**INTERNATIONAL SEARCH REPORT**Information on patent family members

International application No.

PCT/AU2004/001712

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in<br>Search Report |             |    |          | Patent Family Member |          |    |          |
|---|-------------|----|----------|----------------------|----------|----|----------|
| US  | 20030134409 | CA | 2455477  | EP                   | 1432317  | WO | 03013252 |
| WO  | 200178506   | AU | 24719/00 | AU                   | 74802/01 | CA | 2343923  |
|   |             | CA | 2405856  | EP                   | 1113824  | EP | 1278411  |
|   |             | US | 6057488  | US                   | 6417423  | US | 6653519  |
|   |             | WO | 0020073  |                      |          |    |          |
| US  | 6504077     | AU | 63377/00 | WO                   | 0078403  |    |          |
| US  | 6569353     |    | NONE     |                      |          |    |          |
| US  | 6664298     |    | NONE     |                      |          |    |          |
| US  | 5789649     | US | 6492572  |                      |          |    |          |
| WO  | 0045896     | AU | 4970I/00 | EP                   | 1169488  | US | 6235351  |

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX

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